



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

August 19, 2019

Terrie Moore
Regulatory Affairs Manager
Bayer CropScience
Environmental Science division
2 T.W. Alexander Drive
RTP, NC 27709

Subject: Registration Review Label Mitigation for Fosetyl-Al
Product Name: 12ESP705 Fungicide
EPA Registration Number: 432-1541
Application Date: October 7, 2016
Decision Number: 553781

Dear Terrie Moore:

The Agency, in accordance with the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, has completed reviewing all of the information submitted with your application to support the Registration Review of the above referenced product in connection with the Fosetyl-Al Interim Decision, and has concluded that your submission is acceptable. The label referred to above, submitted in connection with registration under FIFRA, as amended, is acceptable.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

A copy of your label stamped "Accepted" is enclosed. Products shipped after 12 months from the date of this amendment must bear the new revised label. Your release for shipment of the product bearing the amended label constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6.

If you have any questions about this letter, please contact Darius Stanton by phone at 703-347-0433, or via email at Stanton.Darius@epa.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Linda Arrington', with a stylized flourish at the end.

Linda Arrington, Branch Chief
Risk Management and Implementation Branch 4
Pesticide Re-Evaluation Division
Office of Pesticide Programs

Enclosure

ALUMINUM TRIS	GROUP	P07	FUNGICIDE
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12ESP705 FUNGICIDE

ABNS: Signature Xtra Stressgard , Chipco Signature Xtra Stressgard, Signature Xtra

A plant health promoting systemic fungicide.

ACTIVE INGREDIENT:

Aluminum tris (O-ethyl phosphonate):.....60.00%

OTHER INGREDIENTS:.....40.00%

TOTAL:.....100.0%

EPA Reg. No. 432-1541

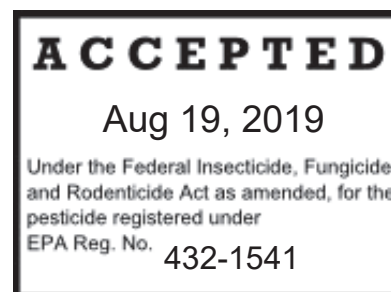
EPA Est. No.

KEEP OUT OF REACH OF CHILDREN CAUTION

See [Back][Side] Panel for First Aid Instructions and [Leaflet][Booklet] for Complete Precautionary Statements and Directions for Use. (Note to reviewer: Location of additional precautionary statements, directions for use will vary between those listed, depending on container type/size.)

For MEDICAL and TRANSPORTATION Emergencies ONLY Call 24 Hours A Day 1-800-334-7577
For PRODUCT USE Information Call 1-800-331-2867

Net Contents:



PRODUCED FOR



Bayer Environmental Science
A Division of Bayer CropScience, LP
5000 CentreGreen Way, Suite 400
Cary, NC 27513

FIRST AID	
If swallowed:	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Have person sip a glass of water if able to swallow. • Do not give anything to an unconscious person.
If in eyes:	<ul style="list-style-type: none"> • Hold eyes open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. • Call a poison control center or doctor for treatment advice.
Have the product container or label with you when calling a poison control center or doctor or going for treatment. In case of medical emergency for additional information call toll free 1-800-334-7577	
NOTE TO PHYSICIAN: Treat symptomatically	

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

- Harmful if swallowed.
- Causes moderate eye irritation
- Avoid contact with eyes or clothing.
- Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

Personal Protective Equipment (PPE):

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions exist for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

Applicators and other handlers must wear:

- Long-sleeved shirt
- Long pants
- Shoes plus socks
- Chemical resistant gloves made of any waterproof material.

Engineering Controls:

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS
Users should: <ul style="list-style-type: none"> • Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. • Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. • Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

Drift and runoff may be hazardous to aquatic organisms in neighboring areas. Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash-waters.

CONDITIONS OF SALE AND LIMITATIONS OF WARRANTY AND LIABILITY

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Ineffectiveness, plant injury, other property damage, as well as other unintended consequences may result because of factors beyond the control of Bayer CropScience LP. Those factors include, but are not limited to, weather conditions, presence of other materials or the manner of use or application. All such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE LP MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of Bayer CropScience LP is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE LP DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

LIMITATIONS OF LIABILITY: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW THE EXCLUSIVE REMEDY OF THE USER OR BUYER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT BAYER CROPSCIENCE LP'S ELECTION, THE REPLACEMENT OF PRODUCT.

DIRECTIONS FOR USE

It is a violation of federal law to use this product in a manner inconsistent with its labeling.

Read entire label before using this product.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 48 hours.

PPE required for early entry to treated areas (that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water), is:

- coveralls over long-sleeved shirt and long pants,
- socks and shoes,
- chemical-resistant gloves made of any of any waterproof material such as natural rubber \geq 14 mils.

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses.

Do not enter allow others to enter the treated area until sprays have dried.

PRODUCT INFORMATION

12ESP705 FUNGICIDE is a plant health promoting systemic fungicide.

For use on:

- Turf on golf courses, sod farms, sport fields, institutional, municipal, and commercial sites.

PLANT HEALTH

12ESP705 FUNGICIDE when applied at the prescribed rates and intervals promotes healthier roots, increases plant drought tolerance, and improves plant water utilization. This leads to a reduction in the need for hand watering and a general saving of water use. The resulting improvement in function of these healthier roots leads to more efficient uptake of plant nutrients improving cell turgidity and results in a healthier and sturdier plant structure reducing the impact of traffic or mechanical damage. These effects are consistent with the properties of anti-oxidants. A property of **12ESP705 FUNGICIDE** is to act as an inducer of systemic resistance in plants resulting in production of plant metabolites responsible for maintaining plant processes.

Cool season grasses such as tall fescues, bluegrasses and bentgrasses are prone to damage during summer heat and summer decline leading to reduced root mass in the summer months. Turf treated with **12ESP705 FUNGICIDE** retains turf quality through summer stress by alleviating plant stresses, enhancing disease resistance through induced system resistance and protecting the plant from the adverse effects of solar radiation.

Warm season grasses such as bermudagrass and zoysiagrass, influenced by the effects of insufficient sunlight, are prone to losing chlorophyll and premature senescence. **12ESP705 FUNGICIDE** reduces the negative effects of low light conditions, supports earlier spring green up, turf fill in and extends turf quality.

12ESP705 FUNGICIDE when applied in a program with turf growth regulators further enhances the overall quality of the turf.

APPLICATION INFORMATION

12ESP705 FUNGICIDE must be applied as a foliar spray using ground application equipment. Apply in 1 to 5 gallons of spray solution per 1000 sq ft.

This product may cause staining. Avoid off-target sites such as sidewalks, patios, driveways, pavers, or similar materials. Do not enter treated areas until spray has dried. Rinse spray equipment thoroughly with warm water and detergent.

SPRAY MIXING AND COMPATIBILITY

12ESP705 FUNGICIDE may not be chemically compatible with foliar fertilizers or with copper-based fungicides and phytotoxicity may occur. To determine the physical compatibility of **12ESP705 FUNGICIDE** with any other product, use a small container to mix a small amount (e.g. 1 pint) of spray solution, containing all ingredients in the same order and ratio as the anticipated use. If any indication of physical incompatibility develops, do not use this mixture for spraying. Indication of incompatibility usually appears within 5 - 15 minutes after mixing. Read and follow all directions and precautions on this label and on the labels of any products for which a tank mixture is being considered.

PRODUCT USE RESTRICTIONS

- Do not exceed a total of 240 lbs of product per acre (144 lb a.i./A), per year.
- Do not graze animals on treated turf.
- Do not feed clippings from treated turf to livestock and poultry.
- Apply by ground application equipment only. Do not apply by air unless directed by Supplemental or Special Local Need labeling.

TURF USE DIRECTIONS

12ESP705 FUNGICIDE is a systemic fungicide, which may be used, in a seasonal program for the control of Pythium diseases, such as blight and root rot, and yellow tuft on common turfgrasses on golf courses, sod farms, sport fields, institutional, municipal, and commercial sites. Apply as a foliar spray, using 1 to 5 gallons of spray solution per 1,000 square feet, as indicated in the table below. Apply with a properly calibrated sprayer. Maintain agitation during spray operations.

When applying use spray nozzles that will deliver fine or larger spray droplets as defined in the American Society of Agricultural and Biological Engineers (ASABE) standard ANSI/ASAE S572.1 (March 2009).

PLANT HEALTH

12ESP705 FUNGICIDE has a plant health component that is used for the prevention or alleviation of stress from solar radiation and other oxidative processes on turfgrasses. Begin preventative applications prior to the occurrence of adverse weather conditions and repeat at prescribed intervals. Use higher rates prior to the onset of severe stress. **12ESP705 FUNGICIDE** does not replace the use of soil amending adjuvants for soil hydrophobicity and must be used in conjunction with best turf management practices.

STRESS MANAGEMENT	RATE OZ PRODUCT /1000 SQ FT	INTERVAL OF APPLICATIONS (DAYS)	APPLICATION DIRECTIONS
Stresses such as <ul style="list-style-type: none">• high solar radiation[**]• high wilt potential[**]• winter cold injury* [**]• hot and humid weather[**]• traffic wear[**]• physical or mechanical damage[**]• injury from the use of turf growth regulators*[**]• injury from disease[**]• reduced mowing heights[**]	2 - 4	7 - 14	Extend application interval beyond 14 days when climatic conditions are less favorable for turf growth. Do not mow or irrigate treated area until sprays have completely dried.
	4 - 6	14 - 21	
*Apply after damage has occurred [** Stress management not applicable for use in California] Do not exceed a total of 240 lbs of product per acre (144 lb a.i./A), per year.			

APPLICATIONS FOR TURF DISEASES

DISEASE	RATE OZ PRODUCT /1000 SQ FT	INTERVAL OF APPLICATIONS (DAYS)	APPLICATION DIRECTIONS
Pythium diseases, Yellow tuft	2 - 4	7-14	Begin preventive foliar spray application when conditions first favor disease and repeat at prescribed interval. Use the highest rate for the longer interval. Do not mow or irrigate treated area until sprays have completely dried.
	4 - 6	14 - 21	
Bacterial Wilt	2 – 4	7	Use the more frequent interval when severe symptoms appear.
	6	14	
Do not exceed a total of 240 lbs of product per acre (144 lb a.i./A), per year.			

USE AS A RESISTANCE MANAGEMENT TOOL

For resistance management, please note that 12ESP705 FUNGICIDE contains a Group P07 [phosphonates] fungicide. Any fungal population may contain/develop individuals naturally resistant to 12ESP705 FUNGICIDE and other Group P07 fungicides. A gradual or total loss of pest control may occur over time if these fungicides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

To delay fungicide resistance, take one or more of the following steps:

- Use tank mixtures with fungicide from a different group that are equally effective on the target pest when such use is permitted. Use at least the minimum application rate as labeled by the manufacturer.

- Adopt an integrated disease management program for fungicide use that includes scouting, uses historical information related to pesticide use, and crop rotation, and which considers host plant resistance, impact of environmental conditions on disease development, disease thresholds, as well as cultural, biological and other chemical control practices.
- Where possible, make use of predictive disease models to effectively time fungicide applications. Note that using predictive models alone is not sufficient to manage resistance.
- Monitor treated fungal populations for resistance development.
- For further information or to report suspected resistance contact Bayer CropScience at 1-866-99BAYER (1-866-992-2937). You can also contact your pesticide distributor or university extension specialist to report resistance.

TANK MIXTURES

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal.

PESTICIDE STORAGE

Store in original container and keep tightly closed when not in use. Store in a cool dry place. Avoid cross-contamination with other pesticides.

PESTICIDE DISPOSAL

Pesticides wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be used according to label instructions, contact your State Pesticide or Environmental Control Agency or Hazardous Waste representative at the nearest EPA regional office for guidance in proper disposal methods.

CONTAINER HANDLING

Rigid Non-refillable Containers that are too large to shake (i.e., with capacities greater than 5 gallons or 50 lbs)

Non-refillable container. Do not reuse or refill this container. Refer to Bottom Discharge IBC or Top Discharge IBC, Drums, Kegs information as follows.

Bottom Discharge IBC (e.g. – Schuetz Caged IBC or Snyder Square Stackable)

Pressure rinsing the container before final disposal is the responsibility of the person disposing of the container. To pressure rinse the container before final disposal, empty the remaining contents from the IBC into application equipment or mix tank. Raise the bottom of the IBC by 1.5 inches on the side which is opposite of the bottom discharge valve to promote more complete product removal. Completely remove the top lid of the IBC. Use water pressurized to at least 40 PSI to rinse all interior portions. Continuously pump or drain rinsate into application equipment or rinsate collection system while pressure rinsing. Continue pressure rinsing for 2 minutes or until rinsate becomes clear. Replace the lid and close bottom valve.

Once container is rinsed, offer for recycling if available or puncture and dispose of in a sanitary landfill or by incineration.

Top Discharge IBC, Drums, Kegs (e.g.– Snyder 120 Next Gen, Bonar B120, Drums, Kegs)

Triple rinsing the container before final disposal is the responsibility of the person disposing of the container. To triple rinse the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container at least 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Rinse all interior surfaces. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this procedure two more times.

Once container is rinsed, offer for recycling if available or puncture and dispose of in a sanitary landfill or by incineration.

Non-Seed Treatment Products in Non-Refillable Fiber Drums with Liners

Non-refillable container. Do not reuse or refill this container. Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment, then offer for recycling if available or dispose of in a sanitary landfill or by incineration. If drum is contaminated and cannot be reused, dispose of it in the manner required for its liner.

Non-Seed Treatment Products in Non-Refillable Foil outer pouches of Water soluble Packets (WSP)

Offer foil pouch for recycling if available or dispose of empty pouch in the trash as long as WSP is unbroken.

Rigid Non-Refillable containers with capacities smaller or equal to 5 gallons

PLASTIC CONTAINERS:

Non refillable container. Do not reuse or refill this container. Tripled rinse container (or equivalent) promptly after emptying.

SOLID Dillutable formulations:

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration.

Non-Seed Treatment Products in Non-Rigid, Non-refillable Containers = BAGS

Nonrefillable container. Do not reuse or refill this container. Completely empty container into application equipment. Then offer for recycling if available or dispose of in a sanitary landfill or by other procedures approved by state and local authorities.

Pending 10/07/2015, 09/23/2016, 09/27/2016, 02/04/2018, 02/26/2018, 12/18/2018, 12/20/2018, 01/31/2019, 02/04/2019, 07/27/2019